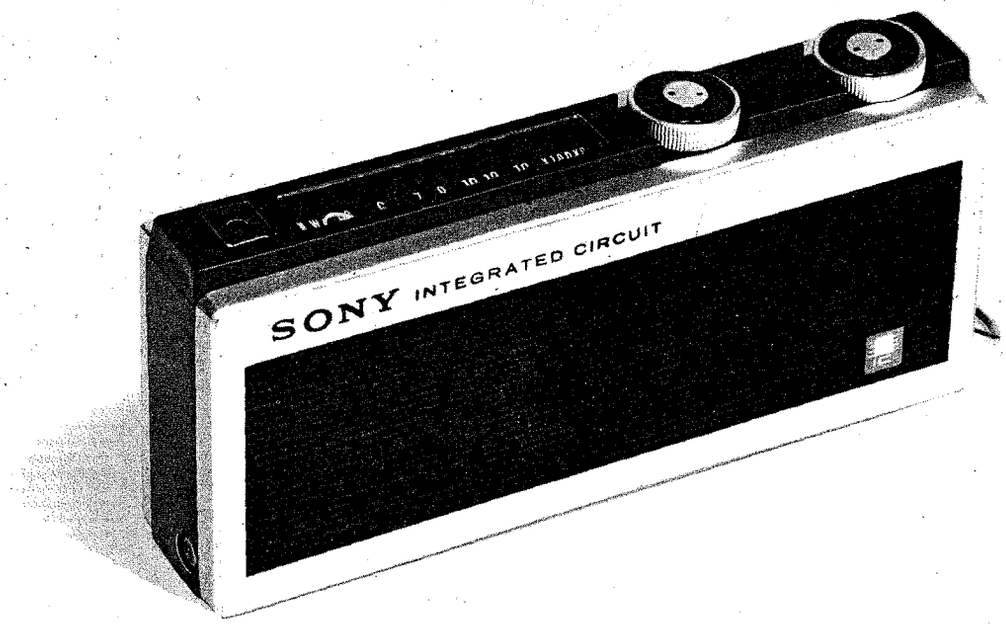
ICR-200
BC-200W,E

2355



Specifications

(ICR-200)

Circuit:	1 IC, 3 Transistor Superheterodyne
Frequency Coverage:	530~1,605 Kc (566~187 m)
Intermediate Frequency:	455 Kc
Antenna System:	Built-in Ferrite Bar Antenna
Maximum Sensitivity: (at 10 mW output)	200μV/m
Selectivity:	25 dB at 10 Kc off resonance, at 1,400 Kc
Power Output:	100 mW (undistorted) 150 mW (maximum)
Current Drain:	8.5 mA at zero signal, 48 mA at 100 mW output
Power Source:	Nickel Cadmium Battery 3.66V in total Rechargeable by using SONY Charger BC-200W or BC-200E for House Current
Speaker:	1¼×2¼″ (3.2×5.6 cm) PM dynamic, 8Ω
Dimensions:	4⅜ (W)×1⁵⁄₁₆ (H)×⁵⁄₁₆ (D)″ (111.5×49×24 mm)
Weight:	6 oz. (170 gs.) with batteries

	(BC-200W)	(BC-200E)
Input:	AC 117V	AC 220V
Output:	DC 3.66V 40 mA	DC 3.66V 40 mA
Dimensions:	1½ (W)×1¼ (H)×1¾ (D)″ (38×32.5×44 mm)	1½ (W)×1¼ (H)×1¾ (D)″ (38×32.5×44 mm)
Weight:	2.8 oz.	2.8 oz.

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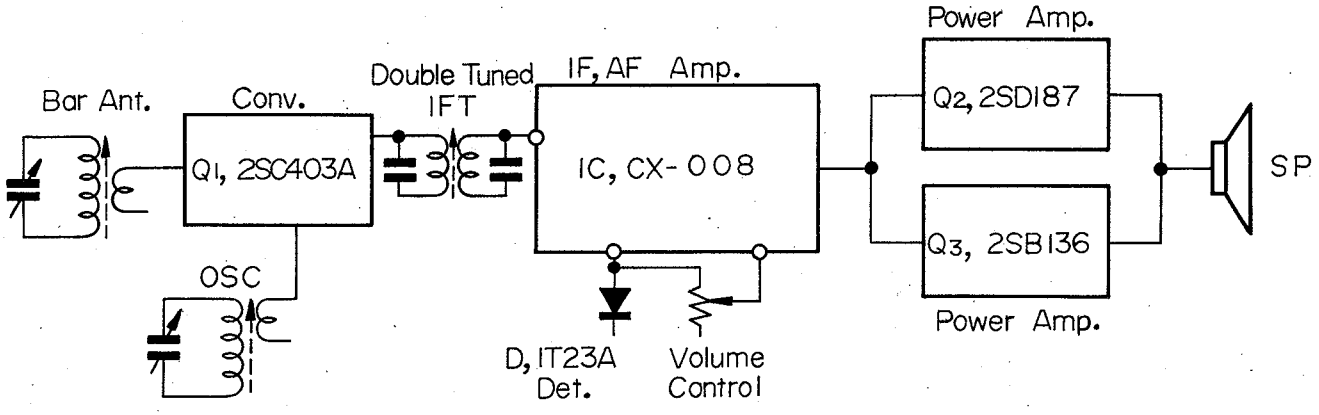
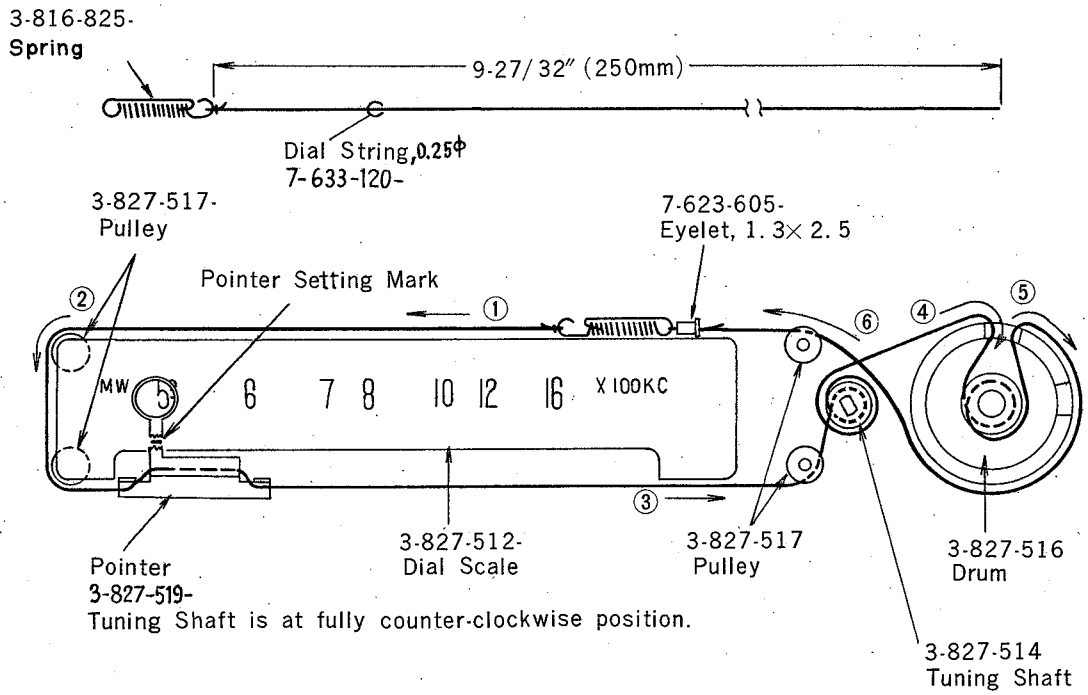
SERVICE MANUAL

2355

Block Diagram



Dial Cord Stringing

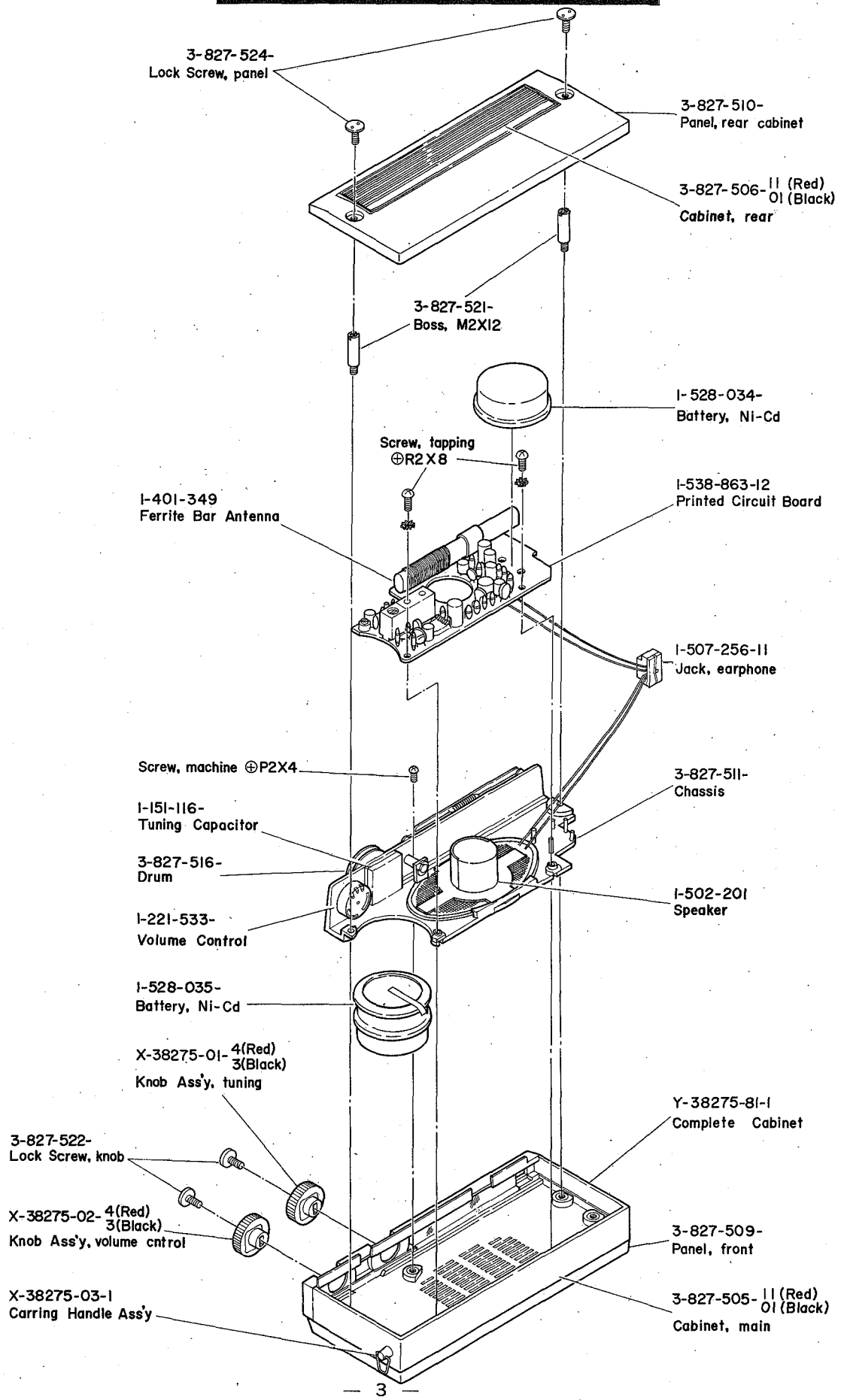


Tuning Shaft is at fully counter-clockwise position.

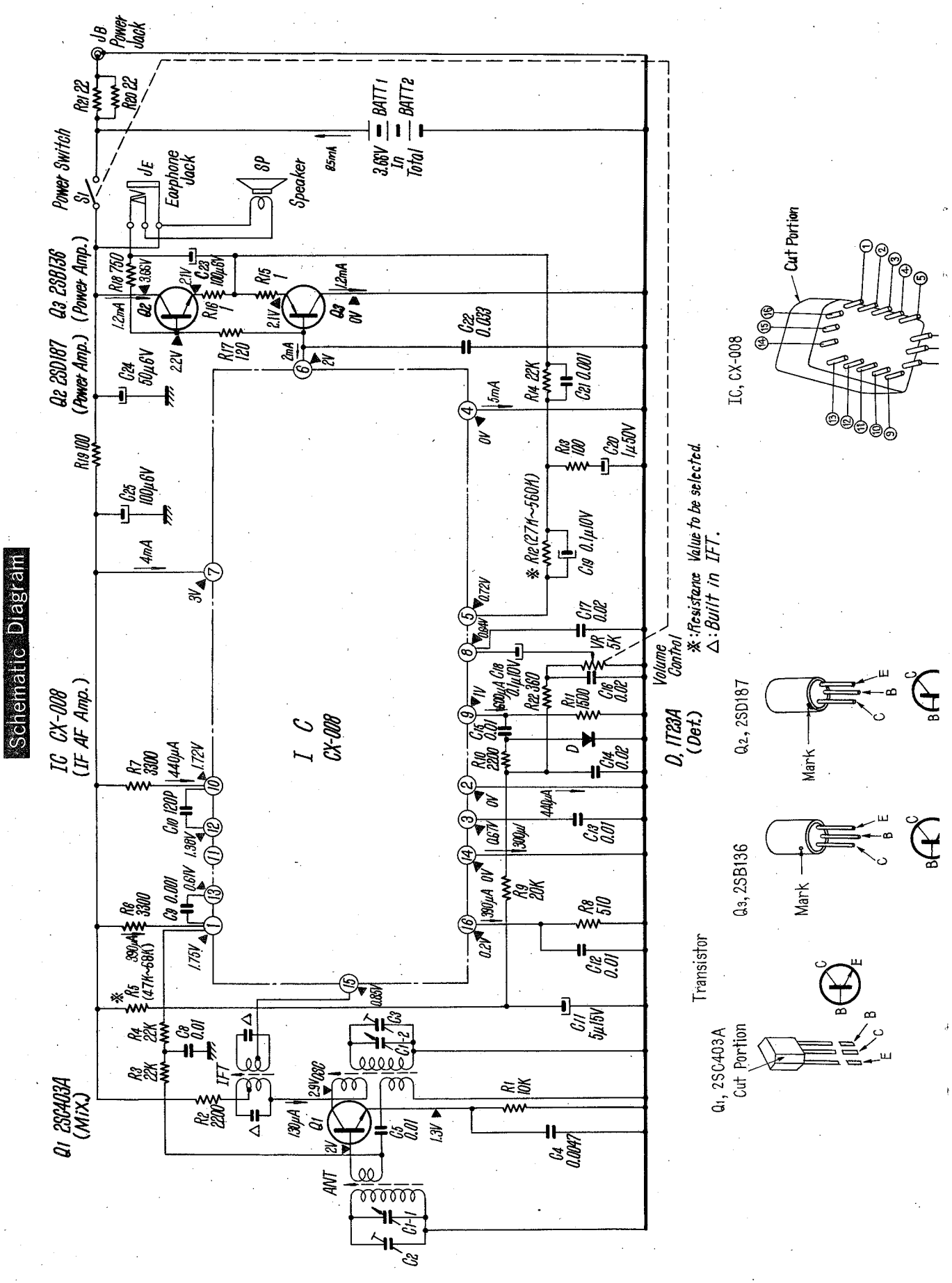
Pointer Setting

Turn the Tuning Shaft counter-clockwise to the full.
And set the Pointer to Pointer Setting Mark on dial scale.

Removal of Cabinet & Printed Circuit Board



Schematic Diagram



Complete Spare Parts List for BC-200E

June, 1968

Part No.	Description	
A. Mechanical Parts		
X-20524-03-1	Charger Case Ass'y	
2-052-403	Charger Cover	
-404	Cushion	
-405	Indicator, DC plug	
2-051-504	Bushing	
B. Electrical Parts		
1-538-882-11	Printed Circuit Board	
1-441-445	Transformer, power	
1-534-505	Cord with DC Plug	
	Diode, silicone SD-1Z	
	Capacitor, paper	
1-115-090	0.022uF	600WV

Complete Spare Parts List for BC-200 (W)

June, 1968

Part No.	Description
A. Mechanical Parts	
X-20524-02-1.	Charger Case Ass'y
2-052-403	Charger, cover
-404	Cushion
-405	Indicator, DC plug
2-051-504	Bushing
B. Electrical Parts	
1-538-882-11	Printed Circuit Board
1-441-408	Transformer, power
1-534-505	Cord with DC Plug
	Diode, silicone SD-1Z
	Capacitor, paper
1-115-090	0.022uF 600WV

Complete Spare Parts List for ICR-200

Feb., 1968

Part No.	Description
A. Cabinet and Appearance Items	
Y-38275-81-1	Complete Cabinet, including
3-827-505-01, -11	Cabinet, main -01; Black, -11; Red
-506-01, -11	Cabinet, rear -01; Black, -11; Red
-507-01, -11	Cover, upper -01; Black, -11; Red
-508	Cover, dial
-509	Panel, front
-510	Panel, rear cabinet
-526	Net, speaker
-528	Adhesive Sheet (A), front panel
-529	" " (B), " "
-530	" " (A), rear panel
-531	" " (B), " "
-538-01, -11	Badge "IC" -01; Blue, -11; Black
	* * * * * *
X-38275-01	Knob Ass'y, dial tuning
-02	Knob Ass'y, volume control
-03	Carrying Handle Ass'y
3-827-512	Dial Scale
-519	Pointer
B. Mechanical Parts	
3-827-511	Chassis
-513	Bracket, DC jack
-514	Tuning Shaft
-515	Spring, plate
-516	Drum, dial
-517	D4 Pulley
-518	Shaft, pulley (A)
-520	Washer, plain D8
-521	Boss, M 2 x 12
-522	Lock Screw, knob

Part No.	Description
3-827-523	Cushion, battery
-524	Lock Screw, panel
-525	Washer, nylon
-532	Adhesive Sheet (A), speaker
-533	" " (B), "
-535	Insulating Paper
-536	Shield Plate, SP
3-803-026	Spring, dial spring ST1,8
3-820-015	Holder, antenna

C. Electrical Parts

1-538-863	Printed Circuit Board
1-502-201	Speaker (SP)
1-507-256-11	Jack, earphone (JE)
-257-11	Jack, power (JB)
1-528-034	Battery, Ni-Cd (BATT2)
-035	" (BATT1)

Coil and Transformer

1-401-349	Bar Antenna Coil (ANT)
1-405-320	Oscillator Coil (OSC)
1-403-136	IF Transformer (IFT)

Variable Capacitor

1-141-022	Trimmer Capacitor, ceramic (C2,3)
1-151-116	Tuning Capacitor, ceramic (VC C1)

Potentiometer

1-221-533	Volume Control (VR R22)

Semiconductor

Transistor	2SC403A (4)	Q1
"	2SD187	Q2
"	2SB136	Q3

Part No.	Description		
	Diode	1T23A	D ----------
	IC	CX-008	IC ----------
	Carbon Resistor (RD¼SR, ±5%)		
1-244-601	R15,16	1 ohms	----------
-633	R20,21	22 "	----------
-649	R13,19	100 "	----------
-651	R17	120 "	----------
-662	R22	360 "	----------
-670	R18	750 "	----------
-681	R2	2.2K "	----------
-685	R6	3.3K "	----------
-697	R1	10K "	----------
-704	R9	20K "	----------
-705	R3,4,14	22K "	----------
-713		47K "	
-714		51K "	
-715	R5 (Adjust)	56K "	----------
-716		62K "	
-717		68K "	
-707		27K "	
-709		33K "	
-711		39K "	
-713		47K "	
-715		56K "	
-717		68K "	
-719		82K "	
-721		100K "	
-722		110K "	
-723		120K "	
-724		130K "	
-725		150K "	
-726		160K "	
-727		180K "	
-728		200K "	
-729		220K "	
-730		240K "	
-731		270K "	
-732		300K "	
-733		330K "	

Part No.	Description		
1-244-734	R12 (Adjust)	360K ohms	
-735		390K "	
-737		470K "	
-739		560K "	

Resistor, ceramic (RT1/10RL, ±5%)

1-208-026	R8	510 ohms
-037	R11	1.5K "
-041	R10	2.2K "
-045	R7	3.3K "

Capacitor, styrol

1-103-603	C10	120PF	±5%	50WV

Capacitor, mylar (±20%, 50WV)

1-105-821-12	C9	0.001uF
-827-12	C21	0.0033uF
-829-12	C4	0.0047uF
-411-12	C13,15	0.01uF
-414-12	C22	0.033uF

Capacitor, electrolytic ($^{+200}_{-10}$%)

1-121-442	C20	1uF	50WV
-463	C11	5uF	15WV
-487	C24	50uF	6WV
-491	C23,25	100uF	"

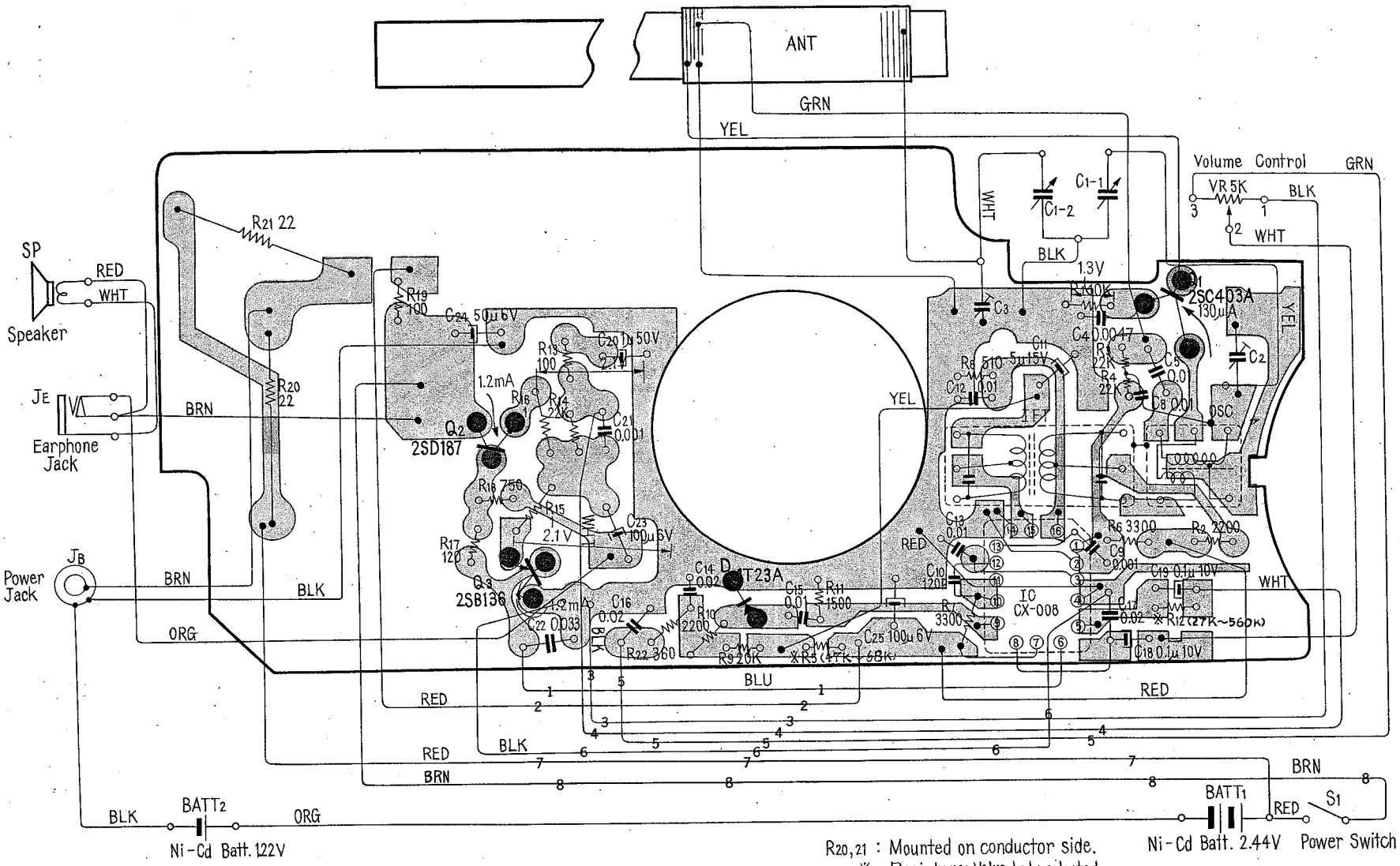
Capacitor, aluminum electrolytic

1-127-019	C18,19	0.1uF	10WV

Part No.	Description
D. Screw, Washer and Nut (Min. Q'ty for Ordering: 100 pcs.)	
	Screw
7-621-253-22	(+) P 1.7 x 3 (for Volume Control) ----------
-32	(+) P 1.7 x 4 (for Drum) ----------
-255-12	(+) P 2 x 3 (for Bracket) ----------
-22	(+) P 2 x 4 (for Chassis) ----------
-720-41	Tapping (+) R 2 x 8 (for Printed Circuit Board) ---
	Washer
7-623-310-05	Lock, ext. tooth 2ø (for Printed Circuit Board) ---
	Eyelet
7-623-605-01	1.3 x 2.5 ----------
	Retaining Ring
7-624-104-01	D2 Type (for Shaft, Handle) ----------
E. Attached Items	
3-827-534	Carrhing Case ----------
3-995-440-01	Instruction Manual ----------
1-504-036	Earphone ME-25 ----------
3-827-539	Packing Case ----------
-540	Packing Carton ----------
-542	Master Carton, 12 sets ----------
-543	Polyethylene Bag ----------

Mounting Diagram

—Conductor Side—

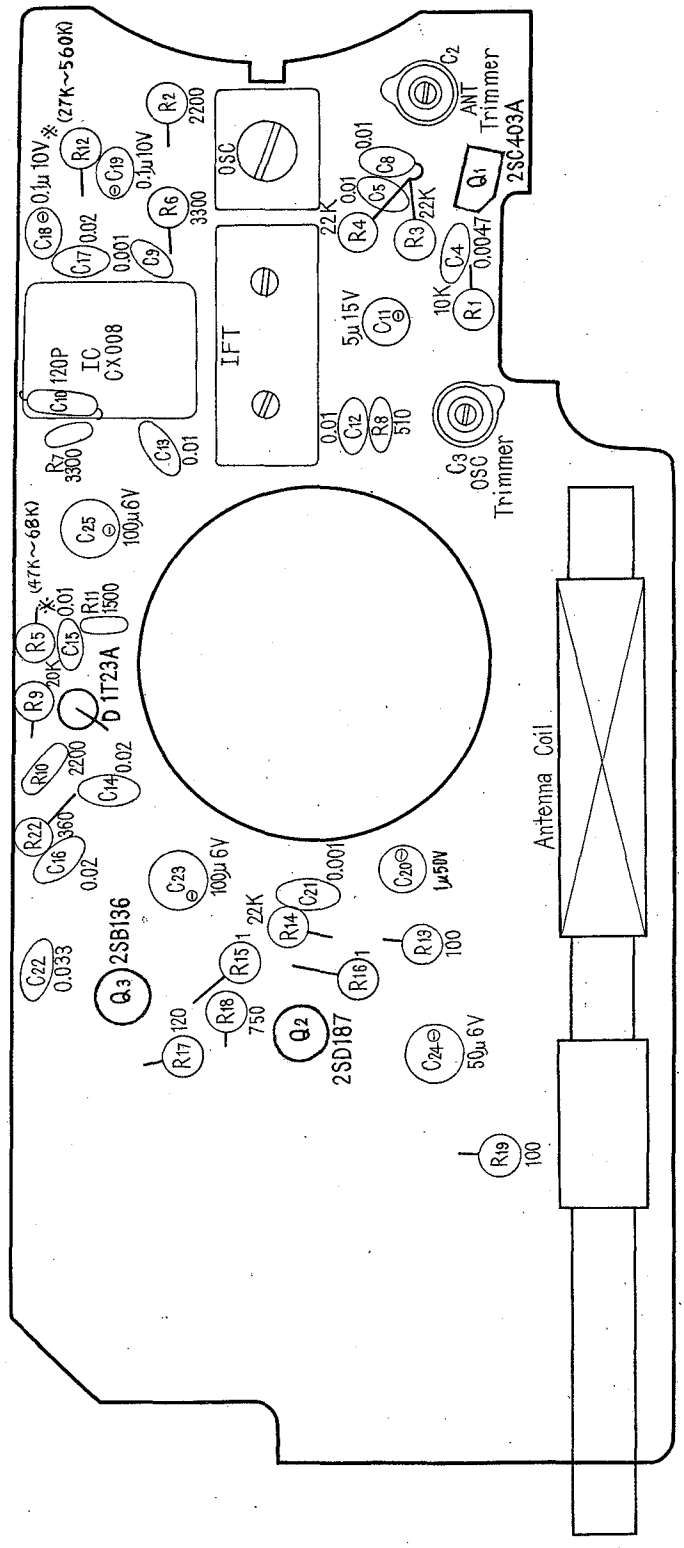


R20,21 : Mounted on conductor side.

※ : Resistance Value to be selected.

Mounting Diagram

—Component Side—



※ Resistance Value To be selected.

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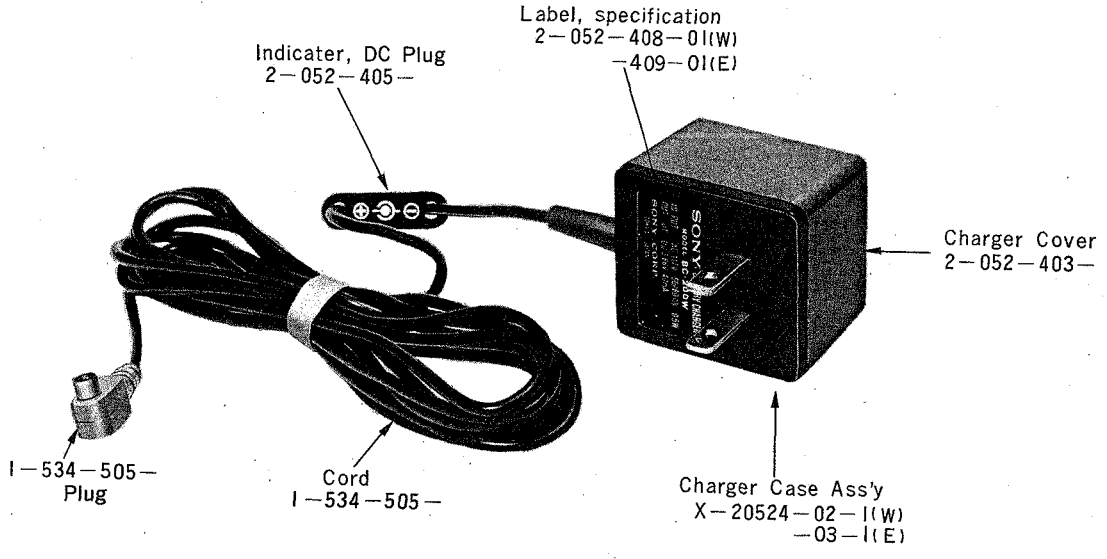
Frequency Coverage and Tracking Adjustment

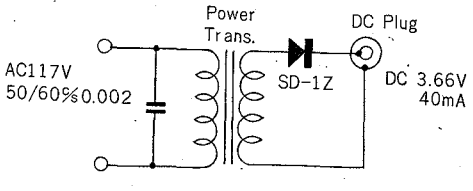
Adj. Item	SSG (Standard Signal Generator) Coupling	SSG Freq.	Receiver Dial Setting	Connect VTVM	Adjust	Remarks
Frequency Coverage	Loop Antenna	520 Kc (1,000 c/s 30% AM)	Fully Left	To Earphone Jack with 8Ω load resistor in parallel	OSC Coil (OSC)	Adjust for maximum meter reading. Volume: Max. Power Source: DC 3.66V
		1,680 Kc (〃)	Fully Right		OSC Trimmer (C_3)	
Tracking	—ditto—	620 Kc (〃)	Tune to 620 Kc signal	—ditto—	ANT Coil (ANT)	—ditto—
		1,400 Kc (〃)	Tune to 1,400Kc signal		ANT Trimmer (C_2)	

BC-200W, BC-200E

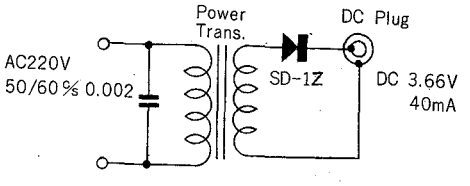


Schematic Diagram

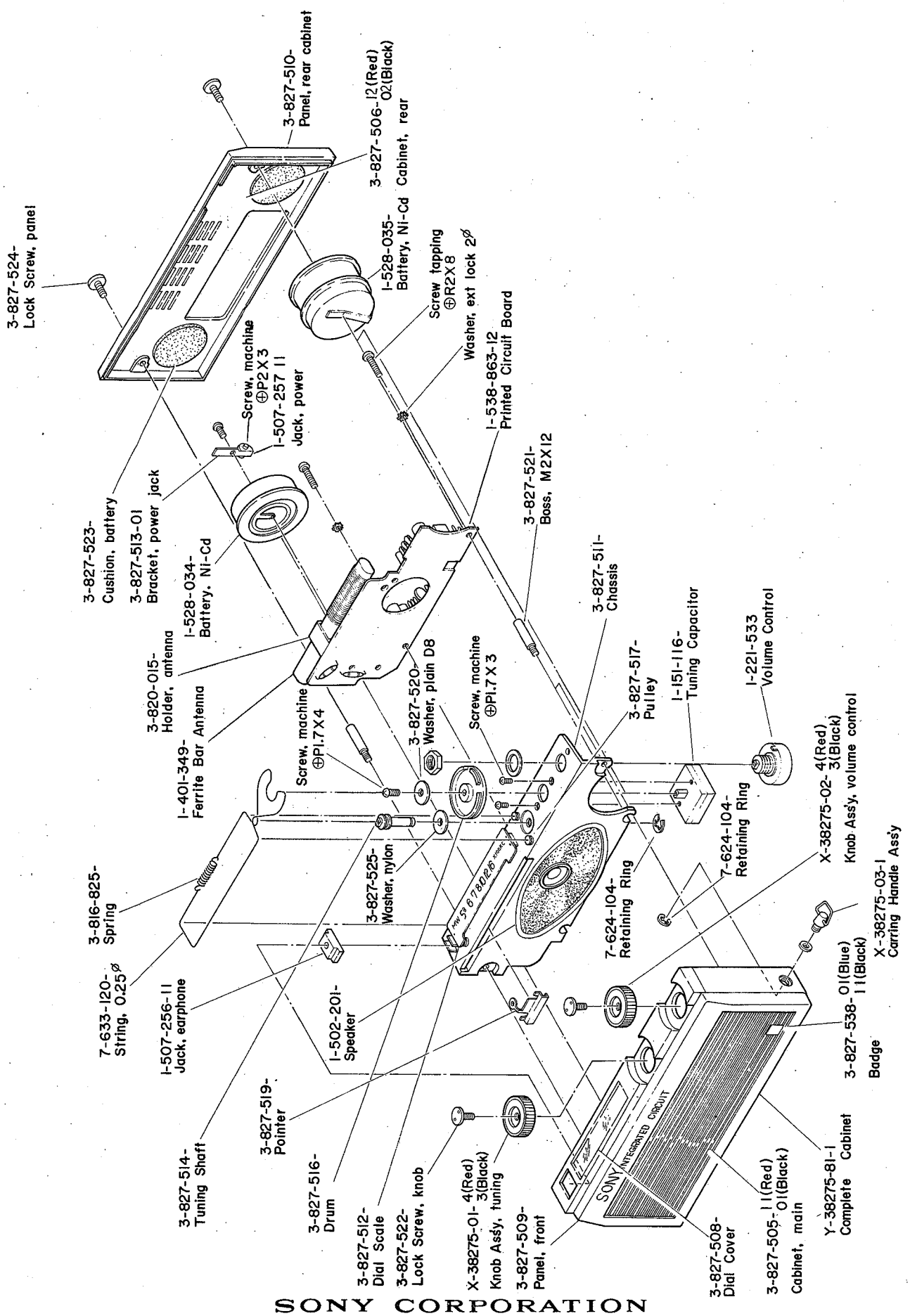
BC-200W



BC-200E



Exploded Diagram



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